FOOD SAFETY

A GUIDE FOR WYOMING FOOD SERVICE WORKERS

WYOMING DEPARTMENT OF AGRICULTURE
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The principles of food safety have changed dramatically in the last ten years. To protect the public and to ensure safer food, the Wyoming Department of Agriculture, Consumer Health Services, has developed this booklet. To do your job correctly you need to understand the **Four Key Principles** in providing safe food to the public. These are:

I. **Taking responsibility for your own personal hygiene, exercising good handwashing, and being a healthy food service employee.**

II. **Knowing what potentially hazardous foods are, and keeping potentially hazardous foods at correct and safe temperatures.**

III. **Using correct cool down methods for all potentially hazardous foods.**

IV. **Practicing good sanitization methods to prevent cross contamination**.

Taking responsibility for these principles means that you have done your part to protect the public from foodborne illness. As a representative of the food service industry, it is very important that you practice these procedures in your daily work. Your mission and ours is to prevent foodborne illness, provide safe food to the dining public, and to ensure a safe working environment.

WHAT IS FOODBORNE ILLNESS?

Foodborne illness results from eating food that is contaminated with harmful virus or bacteria such as Hepatitis A or Salmonella. The unpleasant effects of foodborne illness may require absences from work, school, or leisure activities while the illness runs its course. However, there may be more severe consequences. Diarrhea and the resulting dehydration or loss of water may require hospitalization and can lead to temporary or permanent arthritic conditions and death in some people.

Some people are more vulnerable to foodborne illness than others. The very young and the very old are generally most at risk. Other conditions which increase risk include underlying health problems, infections, pregnancy, diabetes, HIV or taking chemotherapy for cancer.

The number of people in these high-risk categories is increasing. It is your responsibility to do your part to prevent foodborne illness. Remember the **Four Key Principles** for food service workers to prevent foodborne illness!

THE FOUR KEY PRINCIPLES FOR SAFE FOOD HANDLING

I. TAKING RESPONSIBILITY FOR PERSONAL HYGIENE, EXERCISING GOOD HANDWASHING, AND BEING A HEALTHY FOOD SERVICE EMPLOYEE

Twenty five percent (25%) of all foodborne illness is due to improper employee practices.

Anyone working with food must wash their hands thoroughly after using the restroom, eating, smoking, touching contaminated surfaces or working with raw meats or unwashed vegetables. Bacteria can be easily spread to foods, utensils, or even other people.

Employees who are ill with colds, symptoms of diarrhea and vomiting, or employees with cuts, burns, boils or abscesses are at high risk for transmitting illness.

Handwashing Shall Be Done...

Before starting work and during work, as needed, to keep hands clean

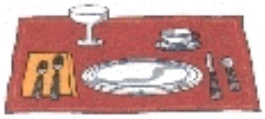
After handling raw foods, especially meat and poultry products

After using the restroom

WASH YOUR HANDS AFTER . . .

Cleaning up spills or touching soiled surfaces or clothing;

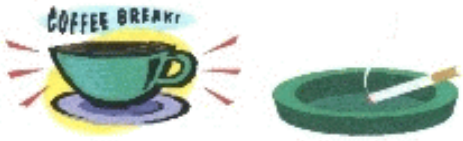
Using the restroom;



Handling dirty dishes and before handling clean dishes;

Between handling raw meat or poultry and serving uncooked foods;

Taking out the garbage or putting away supplies;



Breaks, smoking, eating, or drinking;

Using a handkerchief or tissue; and

Touching or scratching any area of the body (ears, nose, mouth, hair, etc.).

Proper Steps In Handwashing

Use soap and warm running water
Rub your hands vigorously
Wash all surfaces, including:
- under fingernails (use a brush to scrub vigorously under your nails)
- back of hands
- wrists
- between fingers and around your nails

Rinse well
Dry hands with paper towels
Properly wash hands before wearing disposable gloves

Personal Hygiene

Illness - Anyone who is sick should not work with food. Inform your supervisor if you have a severe cold or diarrhea.

Cuts, Abrasions, Burns, and Open Sores - Wounds should be covered with a bandage or dressing, and then covered with a water proof protector such as disposable gloves. Inform your supervisor of all wounds.

Smoking, Eating, Gum Chewing - Smoke only in designated areas, and eat only in the employee dining area.. Gum should not be chewed while working. Follow handwashing procedures after smoking, eating, drinking or chewing gum.

Fingernails - Keep fingernails clean and trimmed. False fingernails and nail polish should not be worn as they may break or chip off into a food product.

Jewelry - Jewelry is not to be worn since it gets dirty easily, can get lost in food or cause injury if caught on equipment.

Uniforms - Uniforms are to be clean, changed daily, and worn in designated areas. Wear clean cloths to work and change into uniforms at work. Uniforms should not be worn to and from work.

Aprons - Wear clean aprons. Aprons should not be used as hand towels. Follow proper handwashing procedures after touching or wiping your hands on an apron. Aprons should be removed when leaving the food preparation area.

Hair Restraints - Hats and hair nets are considered proper hair restraints. Hair restraints are required to keep hair (and its contaminants) out of food. After touching hair or face, follow handwashing procedures.

Grooming - Bathe daily, use deodorants, and change into clean clothes daily. Wear proper work shoes and keep them cleaned.

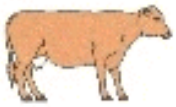
II. KNOWING WHAT POTENTIALLY HAZARDOUS FOODS ARE, AND KEEPING POTENTIALLY HAZARDOUS FOODS AT CORRECT AND SAFE TEMPERATURES.

Potentially hazardous foods are involved in most foodborne illnesses**;** these high protein foods support the rapid growth of disease causing bacteria. These foods are commonly used in food service.

Potentially hazardous foods are foods that consist in whole or in part of:

Milk and Milk Products

Eggs



Meat

Poultry

Fish

Shellfish and Edible Crustaceans

Potentially hazardous foods also include cooked rice, beans, pasta, gravies, soups, potatoes, chili, tofu, and fresh garlic in oil.

All of these foods can cause foodborne illness if not handled properly. Harmful bacteria can get into the food by:

1. food workers who do not practice good personal hygiene
2. food workers who do not monitor and control temperatures of potentially hazardous foods
3. food workers who do not sanitize equipment and who cross contaminate food or food equipment
4. food workers who do not cool down potentially hazardous foods quickly

CORRECT FOOD TEMPERATURES

Keeping foods at the correct temperature helps prevent bacterial growth. Most bacteria grow best in the temperature range of 41ºF to 140ºF. Keeping foods hotter than 140ºF or colder than 41ºF will prevent harmful bacteria from growing. Previously cooked foods or leftovers shall be rapidly reheated to 165ºF on the stove, then placed in a preheated steam table. Steam tables are not to be used to reheat potentially hazardous foods.

A. To keep potentially hazardous foods at safe, correct temperatures, you need to know the following minimum temperature requirements:

1. Cold foods shall be held at or below 41ºF.
2. Hot foods shall be held at or above 140ºF.
3. Beef roast shall be cooked to 145°F for 15 seconds; 140°F for 12 minutes; or 130ºF for 121 minutes.
4. Pork products shall be cooked to 155ºF for 15 seconds.
5. Poultry and stuffed food products containing meat, fish, or poultry shall be cooked to 165ºF for 15 seconds.
6. Rapidly reheat leftovers to 165ºF within 2 hours.
7. Fish and shellfish shall be cooked to 145ºF for 15 seconds.
8. Fresh egg products shall be cooked to 145ºF-155ºF for 15 seconds.
9. Ground beef patties shall be cooked to 155ºF for 15 seconds.

Minimum Holding Temperatures

Hold hot foods at or above 141°F in the steam table or hot holding devices.

TEMPERATURE DANGER ZONE
41°F - 140°F

Hold cold foods at or below 41°F in the cold table, walk-in cooler, or refrigerator.

Minimum Cooking Temperatures

Poultry and stuffed meat products	165°F
Ground beef	155°F
Pork	155°F
Fish	145°F
Eggs	145°-155°F

B. To keep potentially hazardous food at a safe temperature, you must have access to and use a probe thermometer.

How to use a probe thermometer

1. Clean and sanitize the thermometer.
2. Stick the probe thermometer into the thickest part of the food product or stir the food in the case of soups, chili, beans, etc.
3. Allow time for the thermometer to stabilize (about 30 seconds).
4. Read the temperature.
5. Wash and sanitize the thermometer between checking each food.
6. Wash and sanitize before replacing the thermometer in its holder.
7. When checking a food delivery, it is recommended not to puncture through the sealed packaging. Place the thermometer between two packages to check the temperature.

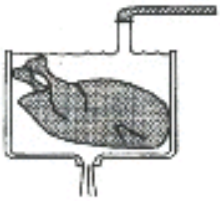
8. Calibrate each thermometer frequently - at least once a month or after a thermometer is dropped. Check with your manager or supervisor to learn how to calibrate a probe thermometer.

C. <u>To keep potentially hazardous foods at safe temperatures, you need to know the four safe ways of thawing frozen foods.</u>

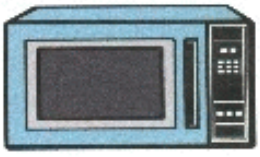
Thaw Frozen Foods

In a walk-in cooler or a refrigerator

As part of the cooking process



In cold running water at 70º F or colder



In a microwave oven (cook immediately)

Frozen foods may not be thawed at room temperature because prolonged thawing can result in excessive bacterial growth and an unsafe food product.

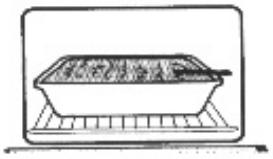
III. USING CORRECT COOL DOWN METHODS FOR ALL POTENTIALLY HAZARDOUS FOODS

Improper cooling of potentially hazardous foods is responsible for 56% of all foodborne illness cases. Therefore, it is important that high risk foods be cooled from 140°F to 41°F or less within 6 hours (140°F to 70°F within 2 hrs. and 70°F to 41°F within 4 hrs.).

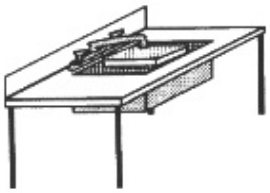
To Cool Potentially Hazardous Foods From ...

140 F to **41 F**

within 6 hours:



1. Place uncovered in a refrigerator (on top shelf in cold air flow) in a 2" shallow metal pan and stir frequently.



2. Quick-chill in an ice-water bath. Stir and cool to 41 F before putting in the refrigerator.

3. Use a Rapid Cool Paddle combined with Quick Chill. The sanitized frozen container is submerged into the hot product. The hot food product container is surrounded with an ice-water mixture. The Paddle is then rotated or stirred in the hot product.

4. Use more cook and serve and reduce the amount of leftovers that need cooling.
5. Divide large quantities of heated foods into small portions.
6. Withhold water during cooking, then add ice after the food is cooked.

IV. PRACTICING GOOD SANITIZATION METHODS TO PREVENT CROSS CONTAMINATION

Cross contamination is the transfer of harmful bacteria from one food to another or by means of an unclean food surface such as utensils, equipment, or human hands coming into contact with food. For example, there are always some bacteria on chicken or other raw meats. A cutting board used for cutting meat must be cleaned and sanitized before using the same board for chopping vegetables or cross contamination will occur and foodborne illness may result. Storage of raw chicken over lettuce is another example of cross contamination.

Employees with poor handwashing practices may contaminate utensils or cooked foods. Improper washing or sanitizing of utensils, counters, boards or knives will result in bacteria traveling to another object or person, simply by touching them.

A. The following safe food handling practices will help control cross contamination:

Employees following proper handwashing practices at all times

Employees with flu-like symptoms restricted from working

Follow proper use of disposable of gloves - change gloves as often as you would wash your hands

Use of utensils or disposable gloves when handling food that will no longer be cooked

Do not use common utensils for raw and then cooked food products

Avoid preparing raw and cooked foods in the same work area

Store raw and cooked foods in separate areas

Store raw meats, fish, and poultry below and separate from cooked foods

Follow proper use and concentration of sanitizers for wiping cloths in the work area

Wash, rinse, and sanitize equipment, utensils, knives, and dishes after each use

B. Sanitizing solutions are essential to minimize and prevent cross contamination of food surfaces The most commonly used sanitizer is bleach. However, iodine or quaternary compounds are acceptable.

Whatever sanitizer compound is used, it is essential that the:

- Sanitizer concentration be correct - with bleach use 1 teaspoon to 1 gallon of warm water to provide the ideal 50 ppm to 100 ppm concentration.

- Test strips must be available to determine the sanitizer strength. Chlorine solutions should not be greater than 200 ppm as this may cause irritation to your hands and may place a toxic film on the food contact surface.

To properly use a sanitizer, the equipment surfaces (slicer, utensils, cutting boards, etc.) shall be:

1. Washed with warm, soapy water,
2. Rinsed with clean water, and
3. Wiped with sanitizer or placed in a sanitizing solution and allowed to air dry.

Thank you for your time and effort in reading and understanding this Food Safety Booklet. If you have a question or need further explanation regarding an item, contact us at Consumer Health Services (307) 777-7211 or contact your local Consumer Health Specialist (inspector).

Our common goal is to minimize and prevent Foodborne Illness by acting on these principles of food safety. You are doing your part to protect the public when you practice these Four Key Elements of Safe Food Handling each day at your work place:

I. Taking responsibility for your own personal hygiene, exercising good hand washing, and being a healthy food service employee.

II. Knowing what potentially hazardous foods are and keeping potentially hazardous foods at correct and safe temperatures.

III. Using correct cool down methods for all potentially hazardous foods.

IV. Practicing good sanitization methods to prevent cross contamination.